

## **REMARKS**

### **I. Amendments to the Claims**

Applicant amends claims 21-38, and add new claims 41-44. The amendments and new claims are supported by Applicant's specification at, for example, page 1, line 32 to page 2, line 9; page 3, line 8 to page 4, line 2; page 4, line 28 to page 5, line 7; and page 5, lines 15-26. Upon entry of this Amendment, claims 21-44, of which claims 21 and 30 are independent, will be pending and under examination.

### **II. Final Office Action**

Applicant acknowledges, with appreciation, the withdrawal of previous rejections under 35 U.S.C. §§ 101 and 112. Applicant, further, respectfully traverses the rejections set forth in the Final Office Action, wherein the Examiner:

- (1) rejected claims 21-26, 29-35, and 38-40 under 35 U.S.C. § 102(b) as being anticipated by Marzo ("An ATM Distributed Simulator for Network Management Research," hereafter "Marzo"); and
- (2) rejected claims 27, 28, 36, and 37 under 35 U.S.C. § 103(a) as being unpatentable over Marzo in view of Szymanski ("Real-Time On-Line Network Simulation," hereafter "Szymanski").

### **III. Response to Rejections**

#### **A. Claim rejections under 35 U.S.C. § 102(b)**

Applicant requests reconsideration and withdrawal of the rejection of claims 21-26, 29-35, and 38-40 under 35 U.S.C. § 102(b) as being anticipated by Marzo. In order to establish anticipation under 35 U.S.C. § 102, the Federal Circuit has held that "[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Furthermore, "[t]he

identical invention must be shown in as complete detail as is contained in the ... claim.”

*Richardson v. Suzuki Motor Co.*, 868 F.2d 1126, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir.

1989). *See also* M.P.E.P. § 2131. Here, Marzo does not disclose each and every element of each rejected claim.

### **Independent Claims 21 and 30**

Regarding independent claim 21, Marzo at least does not disclose a method for simulating a communications network comprising:

providing for each of the plurality of physical network devices a corresponding module or device ... wherein at least one physical network device ... is simulated by a first implementation of a first module or device ... [which] has a plurality of different implementations ... performing a same network function of the at least one physical network device, and each of the plurality of different implementations using a corresponding communication mechanism for communicating with other modules ..., the corresponding communication mechanism ... being different from communication mechanisms used by other implementations; and

providing, for first the module or device, an interfacing object ... having an external side and an internal side ... said external side using a single communication mechanism for communicating with other modules and devices, the single communication mechanism being independent of the first implementation and the single communication mechanism being used by each of the plurality of modules or devices for communicating with other modules and devices, and said internal side being configured to communicate with each of the plurality of different implementations of the first module or device through the corresponding communication mechanism,

as recited in claim 21 (emphases added). In particular, Marzo does not disclose a “first module or device [which] has a plurality of different implementations,” wherein “each of the plurality of different implementations [uses] a corresponding communication mechanism ... [which is] different from communication mechanisms used by other implementations,” and also “providing, for the first module or device, an interfacing object ... having an ... external side [which uses] a single communication mechanism ... independent of the first implementation ... [and an] internal side being configured to communicate with each of the plurality of different

implementations of the first module or device through the corresponding communication mechanism.”

In its rejection of claim 21 on page 3, the Final Office Action associated the claimed plurality of different implementations with the ATM Switch Emulator (ASE) and Traffic Event Generator (TEG) processes in Marzo, and the claimed specific interfacing object with the Generic Interface, SNMP interface, and communication module in Figs. 8 and 9 of Marzo. In particular, the Office Action, on page 3, stated that “ASE modules can be extended, or new modules can be added to ASE; the TEG is ‘completely configurable.’” Marzo, however, does not describe that extensions of ASE, or configurations of TEG, are different implementations which use different communication mechanisms. Moreover, Marzo does not disclose, and the Final Office Action failed to point where it might allegedly disclose, that any of the Generic Interface, SNMP interface, and communication module in Figs. 8 and 9 has an external side which uses a single communication mechanism independent of the specific implementation, and an internal side which is configured to communicate with each of the plurality of different implementations through the corresponding communication mechanism.

Independent claim 30 recites elements similar to those of claim 21, which, as discussed above, are not disclosed by Marzo.

**Dependent Claims 22-26, 29, 31-35, and 38-40**

The Final Office Action, on pages 4-6, asserted that Marzo discloses each and every element of each the above claims. Applicant, however, respectfully disagrees. To begin, as explained above in relation to claims 21 and 30, Marzo does not anticipate claims 22-26, 29, 31-35, and 38-40 by virtue of their dependence, either directly or indirectly, from one of claims 21 and 30.

Moreover, regarding claims 26, Marzo does not disclose

providing a statistics managing module to collect statistic data pertaining to the operation of said simulated network; and measuring said statistic data through said statistics managing module through the external side of said interfacing object

as recited in claim 26. In its assertion to the contrary on page 5, the Final Office Action cited the first paragraph of section 4 in Marzo. However, section 4 of Marzo merely states that

[t]o test the platform, a network management application was developed and connected to the simulation platform. This application was designed as a centralised network management application with a powerful graphic interface that allows a network manager to monitor, obtain statistics and manage the simulated AIM network.

That is, Marzo merely mentions that a network manager obtains statistics, and does not disclose or suggest that statistic data is measured through the external side of the interfacing object, as recited in claim 26. Claim 35, also, recites elements similar to the above elements of claim 26, which are not disclosed by Marzo.

Applicant, therefore, contends that Marzo does not anticipate claims 21-26, 29-35, and 38-40, and respectfully requests withdrawal of the 35 U.S.C. § 102(b) rejection.

**B. Claim rejections under 35 U.S.C. § 103(a)**

Applicant requests reconsideration and withdrawal of the rejections of claims 27, 28, 36, and 37 under 35 U.S.C. § 103(a) as being unpatentable over Marzo in view of Szymanski.

The Office Action has not properly resolved the Graham factual inquiries, the proper resolution of which is the requirement for establishing a framework for an objective obviousness analysis. See M.P.E.P. § 2141(II), citing to *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), as reiterated by the U.S. Supreme Court in *KSR International Co. v. Teleflex Inc.*, 550 U.S. 398, 82 USPQ2d 1385 (2007). Specifically, the Office Action has not properly ascertained the differences between the claimed invention and the prior art, at least because it has

not interpreted the prior art and considered both the invention and the prior art as a whole. See M.P.E.P. § 2141(II)(B).

Applicant has previously established herein that Marzo does not teach or suggest each and every element of independent claims 21 and 30. The Office Action's application of Marzo alone or in combination with Szymanski against the dependent claims does not cure the deficiencies of Marzo as to independent claims 21 and 30. The Office Action's allegations as to Marzo and Szymanski with regard to the dependent claims does not address the failure of Marzo to teach or suggest each and every element of the independent claims, as explained in the previous section.

Specifically, on pages 7-8, the Office Action rejected claims 27, 28, 36, and 37 as being unpatentable over Marzo in view of Szymanski. For each claim, the Office Action relied on Marzo to disclose all features of one of claims 21 and 30 from one of which the claim depends, and further cited Szymanski for the disclosure of additional features which are recited in the claim and are admittedly missing from Marzo. Regardless of whether Szymanski discloses those features for which the Office Action relied on it as to the dependent claims, which the Applicant does not concede, Szymanski does not cure the deficiencies of Marzo. That is, Szymanski does not, for example, teach or suggest a method for simulating a communications network comprising:

providing for each of the plurality of physical network devices a corresponding module or device ... wherein at least one physical network device ... is simulated by a first implementation of a first module or device ... [which] has a plurality of different implementations ... performing a same network function of the at least one physical network device, and each of the plurality of different implementations using a corresponding communication mechanism for communicating with other modules ..., the corresponding communication mechanism ... being different from communication mechanisms used by other implementations; and

providing, for first the module or device, an interfacing object ... having an external side and an internal side ... said external side using a single communication mechanism for communicating with other modules and devices, the single communication mechanism being independent of the first implementation and the single communication mechanism being used by each of the plurality of modules or devices for communicating with other modules and devices, and said internal side being configured to communicate with each of the plurality of different implementations of the first module or device through the corresponding communication mechanism,

as recited in claim 21 (emphasis added).

Dependent claims 27, 28, 36, and 37 are therefore nonobvious and should be allowable at least by virtue of their dependence from one of claims 21 and 30, and because they recite additional features not taught or suggested by the cited references. Applicant therefore requests withdrawal of the remaining 35 U.S.C. § 103(a) rejections.

#### IV. New Claims

Newly added claims 41-44, each depends from, and thus incorporates the above discussed elements of, one of claims 21 and 30, which are not taught or suggested by Marzo and Szymanski.

Moreover, claims 41 and 43 recite that “the plurality of different implementations correspond to a plurality of different manufactured versions of the at least one physical network device.” Marzo and Szymanski do not teach or suggest this element either. In particular, Marzo does not teach or suggest that extensions of ASE, or configurations of TEG, which were associated by the Final Office Action to the recited different implementations, correspond to different manufactured version of a physical network device.

Further, claims 42 and 44 recite, “for each of the plurality of modules or devices a corresponding interfacing object.” Marzo and Szymanski do not teach or suggest such interfacing object for each of the plurality of modules or devices.

New claims 41-44 should also be patentable over the cited references.

V. Conclusion

Applicant respectfully requests reconsideration of this application and withdrawal of the rejection. Pending claims 21-44 are in condition for allowance, and Applicant requests a favorable action.

The Final Office Action contained statements characterizing the related art and the claims. Regardless of whether any such statements are specifically identified herein, Applicant declines to automatically subscribe to any such statements in the Final Office Action.

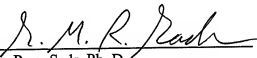
If there are any remaining issues or misunderstandings, Applicant requests that the Examiner telephone the undersigned representative to discuss them.

Please grant any extensions of time required to enter this response and charge any additional required fees to Deposit Account No. 06-0916.

Respectfully submitted,

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